

UNITED STATES DISTRICT COURT  
MIDDLE DISTRICT OF PENNSYLVANIA

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AMERICAN FARM BUREAU  
FEDERATION, *et al.*,

Plaintiffs,

v.

UNITED STATES  
ENVIRONMENTAL  
PROTECTION AGENCY,

Defendant.

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Case No. 1:11-CV-0067

(Judge Rambo)

**EPA’S MEMORANDUM IN SUPPORT OF EPA’S CROSS-MOTION**  
**FOR SUMMARY JUDGMENT**

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The U.S. Environmental Protection Agency (“EPA”) files this reply memorandum in support of its motion for summary judgment and in opposition to Plaintiffs’ response filed May 21, 2012 (DN 109).

### **PRELIMINARY STATEMENT**

In their opposition brief (“Pl. Opp’n”), Plaintiffs for the first time offer evidence in an attempt to demonstrate standing to assert their claims. Their proffer comes too late and should be rejected.

Even if Plaintiffs had demonstrated standing, Plaintiffs still have failed to overcome the strong presumption in favor of upholding agency decisions, and have failed to meet their burden under section 10(e) of the Administrative Procedure Act (“APA”), 5 U.S.C. § 706(2)(A), to demonstrate that EPA’s decision to issue the Chesapeake Bay Total Maximum Daily Load for Nitrogen, Phosphorus and Sediment (“Bay TMDL”) was arbitrary, capricious, an abuse of discretion, or not in accordance with law. Instead, Plaintiffs attempt (improperly) to shift the burden to EPA by arguing that EPA has failed to rebut *their* unsupported allegations. These attempts are unavailing – the burden remains with Plaintiffs.

Indeed, Plaintiffs cannot meet that burden because EPA’s actions were both authorized by the Clean Water Act (“CWA”), 33 U.S.C. §§ 1251–1387, and consistent with its framework of cooperative federalism. Despite Plaintiffs’ attempts to (mis)characterize the nature and effect of a TMDL, the Bay TMDL



remains (like all TMDLs) an informational tool, and none of Plaintiffs' conclusory statements to the contrary change that fact.

Acknowledging that EPA is authorized to establish TMDLs (Pl. Br. 2, 17), Plaintiffs nevertheless ask the court to strike down the Chesapeake Bay TMDL for essentially two reasons: (1) EPA allegedly "coerced" the States into participating in its development; and (2) the Bay TMDL allocations were improperly "locked in" because they can be revised only with EPA approval. Regarding the first, it is hardly surprising that the Chesapeake Bay Program partners' multi-year effort to develop the TMDL included the sort of robust "give and take" that one would expect in such a complex, important, and high-profile undertaking. However, for Plaintiffs to argue that EPA's leadership of this process amounted to an unlawfully invasive "coercion" of state prerogatives is a gross mischaracterization of the administrative record. As to their second objection, it is untenable to argue that the Bay TMDL's allocations are *ultra vires* merely because, pursuant to the CWA and EPA's regulations, their revision would require EPA approval.

In making their arguments, Plaintiffs simply repeat claims that EPA already refuted in its opening brief. Repeating an allegation, however, does not make it true. Indeed, the evidence in the administrative record and the applicable law demonstrate that Plaintiffs are wrong on all counts. Accordingly, EPA is entitled to judgment in its favor.

## ARGUMENT

### **I. The Court Lacks Subject Matter Jurisdiction Because Plaintiffs Have Not Shown That Their Failure to Timely Demonstrate Standing Is Excusable.**

A plaintiff “whose standing is not self-evident is required to demonstrate entitlement to review by means of record or supplemental evidence ‘at the first appropriate point in the review proceeding.’” *Communities Against Runway Expansion, Inc. v. FAA*, 355 F.3d 678, 684 (D.C. Cir. 2004) (“*CARE*”) (quoting *Sierra Club v. EPA*, 292 F.3d 895, 900 (D.C. Cir. 2002)). In record review cases in which a plaintiff challenges agency action, the “first appropriate point” is the plaintiff’s opening brief. *Id.* at 685; *Sierra Club*, 292 F.3d at 900. When filing its opening brief, a plaintiff “must support each element of its claim to standing ‘by affidavit or other evidence.’” *Sierra Club*, 292 F.3d at 899 (quoting *Lujan v. Defenders of Wildlife*, 504 U.S. 555, 561 (1992)).

Plaintiffs’ failure to submit evidence with their opening brief may be excused under two conditions, neither of which is met here. First, this is not a case where the plaintiff “reasonably, if inaccurately,” assumed its standing was self-evident when it filed its opening brief. *See Am. Library Ass’n v. FCC*, 401 F.3d 489, 490-91 (D.C. Cir. 2005). To the contrary, EPA denied factual allegations in the Amended Complaint that go to Plaintiffs’ standing. Defendants’ Answer to the Amended Complaint (DN 23) ¶¶ 7-17. Moreover, Plaintiffs recognized the need to

supplement the administrative record with some 13 declarations and both EPA and intervenors affirmatively challenged Plaintiffs' standing. *See* EPA Opp'n at 26-27; CBF Br. (DN 108) at 11-14.

Second, this is not a case where the Plaintiffs' lapse should be excused because their reply submissions "make it patently obvious that . . . at least one of [Plaintiffs'] members will suffer a cognizable 'injury in fact' *as a result of* the disputed order." *CARE*, 355 F.3d at 685 (emphasis added). Plaintiffs' allegations that the states have been coerced in adopting their Watershed Implementation Plans do not make it patently obvious that Plaintiffs' allegations of future injury when the states implement those plans is "fairly traceable to the challenged action of the defendant, and not the result of the independent action of some third party not before the court," nor that it is "likely, as opposed to merely speculative, that the injury will be redressed by a favorable decision." *Defenders of Wildlife*, 504 U.S. at 560-61; *see Am. Chemistry Council v. DOT*, 468 F.3d 810, 817-18 (D.C. Cir. 2006). Nor is it patently obvious from Plaintiffs' allegations of procedural deficiencies in EPA's decision making process "that at least one of [their] members is 'suffering immediate or threatened injury as a result of the challenged action.'" *Int'l Bhd. of Teamsters v. Transp. Sec. Admin.*, 429 F.3d 1130, 1135-36 (D.C. Cir. 2005) (citations omitted).

**II. EPA Properly Exercised Its Authority Under the Clean Water Act By Establishing TMDL Allocations, Which Are Not Implementation Plans.**

**A. The final TMDL does not violate the Clean Water Act because it is not an implementation plan, much less an unlawful one.**

Plaintiffs' central contention underpinning all their arguments is that setting TMDL allocations is the same as implementing those allocations.<sup>1</sup> Contrary to Plaintiffs' claims: (1) EPA's authority to set TMDL allocations does not intrude on the states' authority to implement those allocations; (2) TMDL allocations are not enforceable or unlawfully "binding," and do not require any particular implementation action – indeed, as numerous courts have held, states have flexibility to implement a TMDL as they deem appropriate; (3) while the Bay TMDL's allocations can, under certain circumstances, be modified by the states, CWA section 303(d)(2) and EPA's regulations necessitate EPA approval of such state modifications; (4) the Bay TMDL's "backstop" allocations are not an "unauthorized" federal action; and (5) EPA did not attempt to improperly expand

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<sup>1</sup> The briefs submitted in this case use some variation of the phrase "setting allocations" as shorthand for referring to EPA's authority to establish TMDLs, load allocations ("LAs") for nonpoint sources and waste load allocations ("WLAs") for point sources. The briefs also use some variation of "implementing allocations" or "implementation plans" to refer to the authority of the states to use their own authorities to reduce pollution, particularly from nonpoint sources. Neither the CWA nor EPA regulations define variants of "allocation" or "implementation" to identify the limits of EPA or state authority.

the scope of its authority through consent decrees, collaboration with the states, or reasonable assurance analyses.

**1. Setting TMDL allocations is not the same as implementing those allocations.**

Plaintiffs cite no authority for their contention that by setting TMDL allocations EPA unlawfully interferes with the states' role in implementing those allocations. Indeed, Plaintiffs' argument is contrary to EPA's longstanding (and never challenged) TMDL regulations dating from 1985 that define a TMDL as *including* WLAs, LAs, and a margin of safety. 40 C.F.R. § 130.2(g)-(i).<sup>2</sup> The court that most recently considered the scope of TMDLs concluded: "A core requirement of any TMDL is to divide sources of contamination along the water body by *specifying load allocations*, or LAs, to predict inflows of pollution from *particular non-point sources*; and to then *set[] wasteload allocations*, or WLAs, to allocate daily caps among *each point source* of pollution." *Anacostia Riverkeeper, Inc. v. Jackson*, 798 F.Supp.2d 210, 248-49 (D.D.C. 2011) (emphasis added).

Accordingly, a TMDL is not a single number; allocations to point and nonpoint

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<sup>2</sup> To the extent that a CWA provision is ambiguous, the court must defer to EPA's regulatory construction unless that interpretation conflicts with the statute. *See Chevron U.S.A., Inc. v. NRDC*, 467 U.S. 837, 841-844 (1984); *cf. Entergy Corp. v. Riverkeeper, Inc.*, 556 U.S. 208, 218 (2009). The court similarly must defer to EPA's construction of its own rules unless that interpretation is "plainly erroneous or inconsistent with the regulation." *Auer v. Robbins*, 519 U.S. 452, 461-62 (1997) (citation omitted).

sources (if present) are required to be included in the TMDL rather than devised at a later stage of post-TMDL “implementation.” *Id.* at 216 (“In addition to setting a maximum daily level of pollution, EPA regulations require TMDLs to allocate contaminant loads among point and non-point sources of pollution.”); *see also Pronsolino v. Nastri*, 291 F.3d 1123, 1133 (9th Cir. 2002); *Sierra Club v. Meiburg*, 296 F.3d 1021, 1025 (11th Cir. 2002).

No court has ever ruled that EPA’s TMDL regulations addressing allocations unlawfully infringe on state implementation authority,<sup>3</sup> and Plaintiffs cite no legal grounds for overturning the regulations. Nor can they challenge those regulations in this action.<sup>4</sup> A TMDL does not, by specifying detailed WLAs and

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<sup>3</sup> To date, EPA and the states have established over 47,000 TMDLs. Of that total, EPA has established approximately 5,000. More than 25,000 TMDLs established or approved by EPA in the past 15 years contain both WLAs and LAs. In all that time, not a single court has held that EPA’s establishment or approval of a TMDL with both WLAs and LAs constituted an illegal invasion of state implementation planning authority. *See, e.g., Dioxin/Organochlorine Center v. Clarke*, 57 F.3d 1517 (9th Cir. 1995) (upholding EPA-established, multi-state, watershed dioxin TMDL containing eight WLAs for individual pulp mills in Oregon, Washington, and Idaho and an unreserved allocation for other point sources, nonpoint sources, and future growth).

<sup>4</sup> EPA’s regulations were subject to challenge under the APA. “The applicable statute of limitations for civil actions against the United States under the Administrative Procedures Act (“APA”) is six years.” *Pa. Dep’t of Public Welfare v. United States Dep’t of Health & Human Servs.*, 101 F.3d 939, 944-45 (3d Cir.

LAs, become an implementation plan. “A TMDL is defined to be a set measure or prescribed maximum quantity of a particular pollutant in a given waterbody, *see* 40 C.F.R. 130.2(i), while an implementation plan is a *formal statement of how* the level of that pollutant can and will be brought down to or kept under the TMDL.” *Meiburg*, 296 F.3d at 1030 (emphasis added); *Bravos v. Green*, 306 F.Supp.2d 48, 56 (D.D.C. 2004). Here, consistent with EPA’s regulations, the Bay TMDL is both the total pollutant cap *and* the specific pollutant loading allocations (WLAs and LAs) that EPA issued on December 29, 2010; the implementation plans are the states’ watershed implementation plans (“WIPs”).

Under EPA’s regulations, TMDL allocations do not, by themselves, prohibit or require any particular implementation actions. Instead, a TMDL identifies pollutant loading levels and (by implication) reductions necessary to meet applicable water quality standards. Those loading levels and reductions may be achieved by various means. *Sierra Club*, 296 F.3d at 1025. Here, EPA, in collaboration with the states, set the TMDL allocations, while the states, concurrently with the development of the TMDL, devised their own plans for implementing those allocations – the Phase I WIPs. *See* EPA Opp’n at 18-24. No state surrendered any of its authority to implement the TMDL.

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1996). Because the regulations providing that TMDLs may establish detailed LAs and WLAs were promulgated in 1985, any APA claim is time-barred.

Allegations of coercion are also unsupported by the record. The fact that EPA and the states collaborated in developing LAs and WLAs does not mean that there was unanimity on all issues. Plaintiffs' few examples of disagreement voiced by the states are what one would expect as part of negotiations among sovereigns over the allocation of a limited resource, and do not reflect unlawful coercion by EPA. Specifically, the excerpt from minutes summarizing a statement by Shawn Garvin (Pl. Opp'n at 21) is part of a larger discussion indicating that, while EPA intended to adhere to the December 31, 2010 deadline for publication of the Bay TMDL adopted by the Partnership, it would work with the states to deal with their constraints (e.g., staffing limitations) in meeting that deadline. Exhibit A at page 7 (AR0000428); Exhibit B (AR0000429); AR0023294-AR0023301; AR0023289-AR0023293. Plaintiffs assert that, just because a state might have raised some objections to the draft allocations it received in the draft Bay TMDL, that state's decision to submit draft and final WIPs or otherwise participate in the collaborative process was not voluntary. Pl. Opp'n at 21-22. The fact is the states – to their great credit – did continue to participate right up to the TMDL's establishment, and there is no credible evidence that such participation was anything but voluntary. It is undisputed that the product of those negotiations – the allocations in the TMDL – has proven to be an acceptable compromise of the states' competing interests and a reaffirmation of the states' commitment to the CBP pollutant reduction goals.



**2. TMDL allocations are not unlawfully binding on point or nonpoint sources.**

Plaintiffs argue that the Bay TMDL is not a lawful “informational tool” because its “detailed WLAs” for point sources are “binding by regulation.” Pl. Opp’n at 10. EPA does not dispute that TMDLs and their WLAs may have legal implications pursuant to the CWA and EPA regulations. *See Anacostia Riverkeeper*, 798 F.Supp.2d at 248-49. However, Plaintiffs’ claim that the TMDL’s wasteload allocations are impermissibly “binding”<sup>5</sup> because of the operation of 40 C.F.R. § 122.44(d)(1)(vii)(B) is wrong. As we already demonstrated, even under the NPDES program, state permit writers retain the flexibility to set effluent limits that are consistent with, but not identical to a WLA. 40 C.F.R. § 122.44(d)(1)(vii)(B); *In re City of Moscow*, No. 00-10, 2001 WL 988721 (EAB July 27, 2001). Plaintiffs’ attempt to distinguish *City of Moscow* is unavailing. While it is true that the effluent limitation in the permit in question was actually more stringent than the “maximum” loading reflected in the WLA, the decision stands for the proposition that TMDL WLAs are not permit limits; that

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<sup>5</sup> Though Plaintiffs use the term often in their brief, it is not entirely clear what they mean by “binding.” Plaintiffs do not claim that the WLAs themselves are “binding” on Plaintiff organizations or their members. This is because TMDLs and WLAs are not enforceable; only NPDES permit limitations and requirements are enforceable against permittees. With respect to point sources, Plaintiffs’ argument appears premised on the assumption that the allocations must be stated verbatim in a permit (Pl. Opp’n at 10-12, 16-19), which, as EPA explained in its prior brief, is not true. *See* EPA Opp’n at 34-33.

TMDL WLAs must be “translated” into such limits by the permit writer (who in the Bay watershed will generally be a state employee); and that permit limits but need not be identical to the WLA itself. It is thus simply not true that the states have no flexibility to make implementation decisions that may differ from the allocation choices reflected in the TMDL.

Indeed, this flexibility is built into and described by the TMDL itself. For example, as described below in Section II.A.3, a state may propose modified allocations and submit them for EPA approval. AR0000332-AR0000333. In addition, the TMDL contemplates the use of pollutant reduction offsets (generated by existing sources with TMDL WLAs and LAs) to allow discharges from new sources that did not receive an express TMDL allocation. AR0000329-AR0000331; AR0000620-AR0000625. A third example of implementation flexibility is provided in Section 10.2 of the TMDL (“Water Quality Trading”), wherein EPA expressly “supports implementation of the Bay TMDL through [water quality trading programs], as long as they are established and implemented in a manner consistent with the CWA . . .” AR0000331-AR0000332. Under such an approach, point and nonpoint sources may trade pounds of phosphorus or nitrogen, provided such trades do not cause or contribute to an exceedance of water quality standards, are not “inconsistent with the assumptions and requirements of the TMDL,” and do not result in a situation where “the combined point source and

nonpoint source loadings covered by a trade” exceed the applicable loading cap established by the TMDL. *Id.*; AR0000620-AR0000625. The upshot is that, under the TMDL as written, point and nonpoint sources can effect trades of pollutant reduction responsibility under the applicable TMDL cap without themselves or the state having to apply to EPA to revise or adjust the allocations that appear in the December 29, 2010 TMDL document. Those allocation numbers remain as they are until they are revised by EPA or the states using the CWA section 303(d)(2) and 40 C.F.R. § 130.7(d)(2) process. AR0000332-AR0000333.<sup>6</sup>

With respect to nonpoint sources, Plaintiffs’ argument that LAs are illegally binding is premised on the characterization of EPA’s ability to withhold grant funding as “coerc[ing] state action.” Pl. Opp’n at 11-12. However, Plaintiffs’ only support for that conclusion is a quotation from *Pronsolino* taken completely out of context. In the portion of the opinion containing the excerpted quotation, the *Pronsolino* court was actually explaining that California had broad flexibility to implement the challenged EPA-established TMDL. *See Pronsolino*, 291 F.3d at 1140 (“California chose both *if* and *how* it would implement the . . . TMDL. States must implement TMDLs only to the extent that they seek to avoid losing federal

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<sup>6</sup> Plaintiffs confuse the issue by appearing to conflate the meaning of TMDL “change” or “revision” with the concept of state flexibility to implement TMDL allocations. As we demonstrate, states have the ability to exercise flexibility in implementing the Bay TMDL without asking EPA to erase and change numbers in the tables of the December 29, 2010 TMDL document.

grant money; there is no pertinent statutory provision otherwise requiring implementation of § 303 plans or providing for their enforcement.”) (citations omitted) The prospect of losing federal grant money as a consequence of not implementing a TMDL does not make TMDLs illegally “binding” or invade the state’s planning process.<sup>7</sup>

Without citing any authority, Plaintiffs insist that, merely by establishing TMDL allocations or anticipating the need to approve any state-proposed allocation revisions, EPA impermissibly infringes on the states’ traditional control over land use, thereby upsetting the balance of federal-state authority established in the CWA. Plaintiffs’ overbroad arguments are unfounded. *See Pronsolino*, 291 F.3d at 1140.

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<sup>7</sup> Plaintiffs cite a fragment of another quotation from *Pronsolino* regarding the state’s freedom “to moderate or to modify the TMDL reductions” for the mistaken proposition that states may revise TMDL WLAs and LAs without seeking EPA approval. *Pronsolino v. Marcus*, 91 F.Supp.2d 1337, 1355 (N.D. Cal. 2000). Read in context, however, it is clear the Ninth Circuit was simply saying that the state had a great deal of latitude when implementing a TMDL’s load allocations to choose which implementation measures to apply and how much of the target loadings it wanted to achieve. It is reading far too much into this short sentence to assume the court also meant that the state could pick up the EPA-established TMDL document and rewrite the TMDL equation itself without, pursuant to section 303(d)(2) and 130.7(d)(2), submitting the revised TMDL document to EPA for approval.

### 3. TMDL allocations may be changed.

Plaintiffs mistakenly claim that the Bay TMDL impermissibly constrains the states because the Bay TMDL (1) discusses a Chesapeake Bay Partnership timeline of 2025 for reaching the TMDL's goals and (2) contemplates submission of future state-proposed TMDL allocation revisions to EPA for approval. *See* Pl. Opp'n at 12-15, 18-19. As already explained, TMDLs are primarily "informational tools" that are not enforceable. However, this does not mean that – once a TMDL and its allocations are established or approved by EPA – they can be revised by the states without EPA approval. It is true that neither CWA section 303(d) nor EPA's regulations at 40 C.F.R. § 130.7 specifically addresses the question of TMDL revision. Nevertheless, the most natural and reasonable interpretation of the statute and those regulations is that – if EPA approval is required following state establishment of a TMDL – EPA approval would also be needed following state *revision* of a TMDL or its allocations. If necessary,<sup>8</sup> the Bay TMDL or its component allocations can be modified, either by EPA itself, or by the states with EPA approval as required under the CWA. Indeed, in Section 10.3 of the TMDL document, EPA described several ways that such changes might be accomplished:

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<sup>8</sup> TMDL Section 10.3 discusses circumstances under which states may have the flexibility to implement the TMDL's WLAs without the need to actually change them. AR0000332-AR0000333. Because there is no federal permit system for nonpoint sources, states have even greater flexibility to implement TMDL LAs without the need to actually change the numbers in the TMDL document.

In [certain] cases, it might be appropriate for EPA to revise the Bay TMDL (or portions of it). EPA would consider a request by the jurisdictions to propose such a revision of the TMDL following appropriate notice and comment. Alternatively, a jurisdiction could propose to revise a portion(s) of the Bay TMDL that applies within its boundaries (including, but not limited to specific WLAs and LAs) and submit those revisions to EPA for approval. If EPA approved any such jurisdiction-submitted revisions, those revisions would replace their respective parts in the EPA-established Bay TMDL framework.

AR0000332-AR0000333.

Furthermore, contrary to Plaintiffs' assertion, EPA did not "establish[] a federal timeline for implementation." Pl. Opp'n at 14, 17. The 2025 implementation target is the *Partnership's* target, *not* EPA's alone. Plaintiffs' allegations to the contrary are squarely contradicted by the record. *See, e.g.*, AR0000428; AR0000429; AR0023294-AR0023301; and AR0023289-AR0023293; AR0007040-AR0007041; AR0007042-AR0007045; AR0000439.

Because the 2025 implementation target was established jointly by the Bay Partnership and because the Bay TMDL and its allocations may be changed, as necessary and appropriate, subject only to EPA approval to ensure any modifications are "established at a level necessary to implement the applicable water quality standards", 33 U.S.C. § 1313(d)(1)(C); 40 C.F.R. § 130.7(c)(1), EPA's TMDL does not impermissibly "lock in" the Bay TMDL allocations.

**4. The Bay TMDL backstops are not “unauthorized federal action.”**

The TMDL’s “backstop” allocations are not “unauthorized federal action” because, like the other allocations, they do not impermissibly constrain the states’ implementation options.

As EPA developed the Bay TMDL, it used the states’ WIPs in almost every instance as the basis for the TMDL allocations. In the three instances where the states’ plans proposed allocations that were not sufficient to achieve water quality standards, EPA informed the states of that fact and worked with them to fill the gap.<sup>9</sup> The backstops were nothing more than instances where EPA could not rely on state-submitted allocations, but instead developed allocations (consistent with its responsibility under section 303(d)) for source sectors where the state’s WIP did not predict achievement of applicable water quality standards. Like all of the TMDL allocations, the states may implement the backstop allocations (with the flexibility afforded by 40 C.F.R. § 122.44(d)(1)(vii)(B) and *Pronsolino*), or pursue revisions through the section 303(d)(2) and 130.7(d)(2) approval process. *See*

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<sup>9</sup> As EPA previously explained, it was neither inappropriate nor “coercive” for EPA to have a dialogue with the states about whether their WIPs proposed allocations and reduction strategies ensure attainment of the Bay’s applicable water quality standards. This collaborative process that synergistically developed the TMDL allocations along with the states’ plans for implementation, was both efficient and a model of “good government” in action. *See* EPA Opp’n at 33-34 (citing AR0000265).

*supra* at 10-13. Moreover, far from “locking in” anything, EPA was careful to point out that backstop allocations did not themselves did not constitute “regulatory action” requiring NPDES permit coverage but only reflected the “possibility” of future permit coverage if the states did not otherwise achieve their allocation targets. AR0000272, AR0000287, and AR0000292.

**5. EPA did not improperly expand its authority in its Bay TMDL actions beyond the scope of its Clean Water Act authority.**

Notwithstanding Plaintiffs’ arguments to the contrary (Pl. Opp’n at. 19-25), EPA did not seek to “expand its authority under Section 303” by improperly resorting to consent decrees, CWA section 117(g), or “reasonable assurance” in an attempt to “invade state implementation authority.” Nor did it misuse the federal-state collaborative process; instead, EPA acted squarely within its authority in establishing the Bay TMDL.

First, EPA never claimed that the applicable consent decrees *expanded* the scope of its CWA authority to establish the Bay TMDL. PL. Br. at 20. Instead, those “consent decrees . . . *acknowledged* EPA’s duty to establish TMDLs for the Chesapeake Bay.” EPA Opp’n at 6. Second, Plaintiffs take exception with EPA and NACWA by arguing that “Congress did not delegate TMDL implementation planning authority to EPA.” Pl. Br. at 19. This argument is either a “straw man” or it proves too much. It proves too much to the extent it asserts that *all* EPA



TMDLs (like this one) that contain WLAs and LAs impermissibly invade state implementation planning authority. If that were true, EPA would never have the authority to establish a TMDL consistent with its own regulations, e.g., containing WLAs and LAs. However, the express language of CWA 303(d)(2), the line of “constructive submission” cases going back to *Scott v. City of Hammond*, 741 F.2d 992 (7th Cir. 1984), and cases like *Pronsolino* and *Dioxin/Organochlorine Center* demonstrate that there is a proper role for EPA establishment of TMDLs, including TMDLs with WLAs and LAs.

Plaintiffs’ argument is a “strawman” because neither EPA nor NACWA claims that the Bay TMDL is an exercise in “implementation planning.” EPA’s TMDL appropriately calculates overall pollutant loading caps for nitrogen, phosphorus, and sediment in the Bay and allocates those loads to individual and sector-specific sources. This is pollutant goal or target setting; not “implementation planning.” Implementation planning was properly left to the states in their WIPs. Significantly, in all but three cases (the so-called “backstops”), EPA’s TMDL allocations *were informed by* the state’s WIPs, not the other way around.

Third, EPA’s collaboration with the states to develop the TMDL and its allocations was perfectly lawful pursuant to CWA section 303(d). The cases cited by Plaintiffs do not prohibit such collaboration. Nor has EPA ever claimed that the

collaborative process with the Bay states, or the Partnership agreements that grew out of that collaborative process, expanded the scope of its authority to establish the Bay TMDL. Instead, “[t]hrough collaborative development of the TMDL and the states’ WIPs, EPA and the states accomplished their respective tasks more efficiently than they could have acting independently – exactly the kind of state-federal cooperation envisioned in the CWA.” EPA Opp’n at 31.

Fourth, CWA section 117(g), reaffirms a strong federal role for ensuring pollution reduction from point and nonpoint sources, requiring that EPA use its authority to “ensure that management plans are developed and implementation is begun” to meet the Bay’s nutrient goals. 33 U.S.C. § 1267(g)(1); *see* EPA Opp’n at 7-8, 42. EPA’s collaboration with the states in the establishment of the Bay TMDL and its accompanying WIPs was fully consistent with this section.

Finally, EPA never claimed that its reasonable assurance analysis provided any additional authority to establish the Bay TMDL or “require TMDL implementation.” Instead, EPA merely explained the statutory and regulatory basis of its authority to consider reasonable assurance, among a number of other factors, when it established the Bay TMDL. EPA Opp’n at 38-41. Among other things, EPA issued guidance in 1991 and 1997 explaining the concept of reasonable assurance. EPA Ex. N; AR0022979-AR0022980. That guidance is entitled to deference. *See Skidmore v. Swift & Co.*, 323 U.S. 134, 140 (1944). As Plaintiffs

note, in 2000, EPA promulgated comprehensive revisions to its TMDL regulations. One – but only one – component of those regulatory revisions addressed reasonable assurance, 65 Fed. Reg 43,486 (July 13, 2000). The entire package of revisions was prevented from taking effect by an appropriations rider passed by Congress. H.R. 4425, 106th Cong. (2000). The rider did not single out “reasonable assurance.” Nor did it affect EPA’s existing regulations, dating from 1985, and it did not alter the pre-existing statutory and regulatory basis for EPA’s authority to use reasonable assurance analysis as a tool for ensuring that TMDLs were properly calibrated. Nor can it reasonably be argued that the Congressional rider – which applied generally to *all* the 2000 revisions and not specifically to reasonable assurance – was intended to “override” EPA’s pre-2000 guidance on the subject. More important, as explained previously, Plaintiffs’ argument that a reasonable assurance analysis undertaken in the context of developing a TMDL encroaches on state implementation authority fails because that analysis legitimately informs the proper setting of pollutant allocations so that the TMDL equation is not “over budget.” Reasonable assurance analysis that evaluates whether the states have documented that point and nonpoint source allocations can and will be achieved over time does not “invade” the states’ authority to decide whether and how to implement those TMDL allocations. *See* EPA Opp’n at 37-41.

**B. The final TMDL does not violate the Clean Water Act by including upstream allocations.**

As EPA explained previously, EPA's establishment of pollutant allocations for all sources and source categories in the Chesapeake Bay watershed was authorized by and consistent with the CWA and EPA's regulations. In enacting CWA section 117, Congress recognized that "the Chesapeake Bay is an ecosystem that ignores State boundaries," and directed EPA to "ensure that management plans are developed and implementation is begun" to meet the Bay's nutrient goals. 33 U.S.C. § 1267(g)(1). Although Congress recognized that a holistic approach to pollutant reduction was needed to meet the Chesapeake Bay's nitrogen and phosphorus goals, Congress did not need to include in section 117 any new authority to establish TMDLs because EPA already had adequate authority under 33 U.S.C. § 1313(d)(1)(C) and the implementing regulations. EPA Opp'n at 42-46. Plaintiffs' crabbed reading of those authorities is not only inconsistent with their plain meaning, but reflects a view of the Act that was rejected by the Supreme Court in a related context. In *Arkansas v. Oklahoma*, 503 U.S. 91 (1992), the Supreme Court ruled that EPA reasonably applied water quality standards of a downstream state to limit point source discharges in an upstream state, despite the absence of express authority in the CWA, and found that such interstate application was "wholly consistent with the Act's broad purpose 'to restore and maintain the

chemical, physical, and biological integrity of the Nation's waters.” *Id.* at 105-06 (citing 33 U.S.C. § 1251(a)).

Plaintiffs’ argument that EPA lacks authority to establish allocations for upstream states simply because states themselves do not have that authority (Pl. Opp’n at 27) is unavailing. For a TMDL like this one – addressing an interstate waterbody impaired by pollutants originating in a seven-jurisdiction watershed – it is reasonable to conclude that EPA’s authority to establish allocations for each of the “receiving water’s” sources of pollution (40 C.F.R. § 130.2(g)-(h)) – regardless of location – is more expansive than that of an individual state acting in isolation. To hold otherwise would limit the TMDL’s effectiveness as an “informational tool” for comprehensively addressing the Bay’s watershed-wide pollutant loading problem. For example, under the TMDL, Pennsylvania’s share (the largest) of the total annual watershed nitrogen loading cap is 73.93 million pounds – approximately 40% of the Bay’s entire nitrogen “diet.” Bay TMDL Chapter 8.5 at 8-33. The informational value of the TMDL for Pennsylvania’s implementation planning purposes would be greatly diminished if that significant slice of the contributing load were not subdivided into WLAs and LAs, as in the other states. That EPA and the states could conceivably have used other authorities to address the Bay’s problems, e.g., CWA § 319(g), does not diminish EPA’s authority under

CWA § 303(d), especially since that was the authority the states and EPA unanimously chose to pursue.

**III. Neither the Public Comment Procedures nor the Use of Models Violated the Administrative Procedure Act**

**A. Plaintiffs have not proved that EPA committed any procedural violations, or that any such violations were neither insubstantial nor harmless.**

Plaintiffs continue to make general assertions that EPA has not shown that it made available for public comment “complete documentation” on its models. This assertion improperly attempts to shift the burden of proof to EPA, and fails to sustain Plaintiffs’ burden to identify with reasonable specificity the deficiencies in the information that EPA did make available and to explain how Plaintiffs would have responded to the “complete documentation” if given the opportunity. *See Small Refiner Lead Phase-Down Task Force v. EPA*, 705 F.2d 506, 540-41 (D.C. Cir. 1983).

As previously explained, “documentation” of a model refers to a specific kind of record that documents the history of a model’s development, calibration and use. EPA Opp’n at 49. Such documentation cannot be completed until a model has been put to its final use, which, in this case, was as “a critical and valuable tool to develop the Bay TMDL.” AR0000005. The models used in development of the Bay TMDLs were a product of the Bay Partnership’s collaborative process, EPA Opp’n at 16-17, and the Partnership issued draft

documentation which was available before and during the public comment period on the draft TMDL. Plaintiffs have identified no information from the final documentation for any model that was not – but should have been – included in the draft documentation made available during the public comment period. To the extent that Plaintiffs use “documentation” to more generally include all information pertaining to a model, Plaintiffs have not identified information that was both missing from the administrative record and necessary for them to adequately comment on the application of each model in the development of the Bay TMDL.

With respect to the Watershed Model, EPA made available before the public comment period its description of how it used the model, AR0023922-AR0023962; AR0024175-AR0024200, and the entire model itself. The Watershed Model was developed by the Chesapeake Bay Program as a community open source model (similar to other open source software such as LINUX) for which the model code and other files are publicly available. As described in the draft TMDL at 5-27 (and repeated again in the final TMDL at 5-30 with minor changes in wording):

As a community model, the Phase 5.3 Bay Watershed Model has open source model code, pre-processors, post-processors, and input data that are freely available to the public (USEPA 2010i). Input data include precipitation information, point sources discharges, atmospheric deposition, and land use (USEPA 2010i). *By offering the*

*Bay Watershed Model as a community model, end users—typically TMDL model developers and watershed researchers and implementation plan developers—can use the model independently as-is or as a starting point for more detailed, small-scale models (USEPA 2010i).* The Phase 5.3 Chesapeake Bay Watershed Model can be downloaded from this ftp site: <ftp://ftp.chesapeakebay.net/Modeling/phase5/community/> or the Chesapeake Community Modeling Program's website at <http://ches.communitymodeling.org/models/CBPhase5/datalibrary.php>.

AR0023948 (emphasis added); *see also* AR0000181.

With the publication of the draft TMDL on September 24, 2010, EPA also provided the public access to the then-current draft of Watershed Model documentation through websites identified above.<sup>10</sup> The available documentation (dated between March 14, 2008 to July 27, 2009) is for the Phase 5 Watershed Model used by EPA in developing the final TMDL and not, as Plaintiffs suggest, the 2005 documentation for a superseded phase of the model. Among other things, the documentation described in detail the data and sources of data used in the model. Plaintiffs do not explain how access to the Watershed Model and documentation for that model (along with a description of and access to its

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<sup>10</sup> The second url is easier to navigate to find the documentation discussed. On the lower right hand side of the screen click on “Phase 5 Model Documentation” which links to <http://ches.communitymodeling.org/models/CBPhase5/documentation.php#p5modeldoc>.



component data and data sources) were insufficient to allow the public to comment on the draft TMDL. Moreover, Plaintiffs' argument that they "automatically" are prejudiced by allegedly having been "denied access to the complete public record" is wrong as a matter of law. The case law Plaintiffs cite for that assertion applies to the initial determination of whether the administrative record is complete, not whether an agency did or did not make available certain documents during the public comment period. As Plaintiffs already have moved this Court to "complete" the administrative record and this Court has long since ruled on that motion, Plaintiffs can make no such argument for automatic prejudice here.

Current documentation and other information for Scenario Builder were also available prior to and during the public comment period.<sup>11</sup> Scenario Builder includes a collection of 130 tables of data and formulas that characterize a range of conditions (e.g., land use patterns, management practices to reduce pollutant loads) for a variety of activities (e.g., animal production, manure storage, fertilizer

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<sup>11</sup> See, e.g., AR0023947-AR0023948; Exhibit C (AR0000430) [12/11/2008 joint meeting of the Agriculture (Nutrient and Sediment Reduction) Workgroup and Watershed Technical Workgroup meeting minutes]; Exhibit D AR0000431 [1/15/2009 joint meeting of the Agriculture (Nutrient and Sediment Reduction) Workgroup and Watershed Technical Workgroup meeting minutes]; Exhibit E; AR0000431 [2/1/2010 Watershed Technical Workgroup Handout, *Estimates of County-Level Nitrogen and Phosphorus Data for Use in Modeling Pollutant Reduction (June 2009)*]; Pl. Opp'n Ex. 15, *Estimates of County-Level Nitrogen and Phosphorus Data for Use in Modeling Pollutant Reduction (September 2010)*].

application) that are significant contributors of nutrients to the Chesapeake Bay. AR00000179-AR0000180. The 130 tables are linked by computer code that allows Scenario Builder to compile data reflecting various “scenarios” or combinations of the pollution loading actions (e.g., farmers applying manure to cropland) and pollution reduction activities (e.g., planting fall cover crop) addressed in the tables. The scenarios are then used as inputs for the Bay Watershed Model to estimate changes in nutrient and sediment loads delivered to the tidal Bay waters. The outputs of the Bay Watershed Model are then used as inputs to the Bay Water Quality/Sediment Transport Model to assess the effect of the delivered loads on tidal water quality.

The draft TMDL directed the public to the then-current documentation for Scenario Builder: the September 2010 publication *Estimates of County-Level Nitrogen and Phosphorus Data for Use in Modeling Pollutant Reduction, Documentation for Scenario Builder Version 2.2*. AR0023947-AR0023948; Pl. Opp'n Ex. 15 (citing USEPA 2010d and AR0024141).<sup>12</sup> That documentation was

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<sup>12</sup> The June 2009 version of the Scenario Builder documentation *Estimates of County-Level Nitrogen and Phosphorus Data for Use in Modeling Pollutant Reduction, Documentation* (June 2009), Exhibit E, was a handout to the February 1, 2010 meeting of the CBP's Watershed Technical Workgroup. This Watershed Technical Workgroup meeting is listed in Appendix C on page C-13. (AR0000434).

available to the public on a website.<sup>13</sup> It described how Scenario Builder was used, and covered, in detail, the mathematical functions, the sources of data, key tables of data, and summaries of other data used in Scenario Builder. The September 2010 Scenario Builder documentation (as well as the 2009 version of the documentation) contained 23 tables that synthesize the key data in the 130 tables used in the Scenario Builder tool itself. *See* Pl. Ex. 15.<sup>14</sup> For example, with respect to poultry, the documentation provided the following sets of information:

- The source of the poultry population data, *id.* (tables 2-1 through 2-42; pages 2-11 through 2-18);
- Data and calculations for determining the amount of nutrients excreted by individual birds by type (e.g., layers, broiler, pullets, turkeys) with original referenced sources of this information, *id.* (table 3-1; pages 3-18 through 3-22);
- Nutrient content of the resultant poultry manure, *id.* (tables 4-1, 4-2, and 4-3; pages 4-25 through 4-27);
- How the effect of the feed additive phytase was accounted for, *id.* (page 4-28);

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<sup>13</sup> See [fn 9] of Exhibit 15 setting forth the path to getting to Model documentation. After clicking on Phase 5 Model documentation one scrolls down to Scenario Builder documentation at url [ftp://ftp.chesapeakebay.net/modeling/P5Documentation/Scenario%20Builder%20Documentation%20-%20FINAL%209\\_16\\_2010.pdf](ftp://ftp.chesapeakebay.net/modeling/P5Documentation/Scenario%20Builder%20Documentation%20-%20FINAL%209_16_2010.pdf).

<sup>14</sup> Plaintiffs' Exhibit 15, the September 2010 Scenario Builder Documentation, was inadvertently left out of the administrative record submitted to the court, but was included by reference in documents that are in the record.

- The amount of ammonia lost through volatilization from the manure, *id* (table 4-4; pages 4-28 through 4-29);
- Loss of nutrients during manure handling and storage, *id* (table 4-45; pages 4-28 through 4-29);
- Accounting for the temporal and spatial differences in agricultural lands utilizing poultry manure (e.g., planting and harvest dates, nutrient application and amounts, nitrogen fixation, crop harvest yields, and much more) , *id* (tables 5-1 through 5-4; pages 5-32 through 5-48),
- Manure application rates and utilization, *id* (table 6-1; pages 6-49 through 6-53);
- Determination of the distribution of agricultural animal production lands, crop lands, hay lands, and pasture lands, *id* (tables 7-1 through 7-3; pages 7-3 through 7-54); and
- Agricultural best management practices, *id* (table 8-1; pages 8-64 though 8-83).

This same level of detailed information was available for all other forms of cropland and animal agricultural production, as well as for non-agricultural land uses present in the Chesapeake Bay watershed, and provided Plaintiffs with the information they needed to comment effectively on the draft Bay TMDL.

Plaintiffs complain that all 130 tables of data were not publicly available until November 2010, but point to no specific information needed to comment but not available in the 23 tables published earlier. Moreover, Plaintiffs have not identified any information in the final Scenario Builder documentation report published in December 2010, AR0014807-AR0014937, that should have been

made available in the documentation available during the public comment period, nor have they identified any other specific deficiencies that prevented effective public comment.

Plaintiffs also complain that EPA did not publish the Scenario Builder code until early November 2010, but do not suggest how having the code available at an earlier date was necessary to allow them to comment on the draft TMDL.<sup>15</sup> Indeed, EPA had previously provided (in the June 2009 and September 2010 editions of the Scenario Builder documentation) a blueprint of how each component of Scenario Builder worked and how the various components fit together – i.e., how the code processed the data in Scenario Builder.<sup>16</sup> Ex. E; Pl. Opp’n Ex. 15. Plaintiffs now have had access to the code for a sufficient time to allow them to identify critical information that is contained in the code but was not contained in the documentation provided before November 2010, but they have identified no such information.

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<sup>15</sup> Plaintiffs’ suggestion that publication of the code near the end of the public comment period impaired their ability to comment is inconsistent with the fact that they released a detailed technical report on December 8, 2010 – long after the close of the public comment period, which they successfully moved to include in the record for this case. *See* DN 92.

<sup>16</sup> EPA did not publish the code itself because it is a large group of files – amounting to an enormous file size when compiled – that is beyond the capabilities of most users to download and, in turn, work with. It is very difficult to understand the processing in Scenario Builder by reading the code.

As described above, the Scenario Builder code is a collection of mathematical equations. Those equations that effectuate previous decisions made through the Partnership's workgroups, goal implementation teams, and committees, and are documented by the record of each respective meeting.

AR0000061, AR0000151; AR0000170-AR0000171; AR0007178-AR0007179.<sup>17</sup>

Those decisions both drive and explain the model code. As a result, the operation of the Scenario Builder code is explained in the briefing materials and meeting summaries compiled by those work groups and committees, all of which are in the administrative record. *See* Bay TMDL, App. C, AR0000422-AR0000454. In addition, the operation of Scenario Builder was explained in detailed webinars presented to the agriculture and development communities. TMDL Sec. 11, App. C, AR0000340 and AR0000443-AR0000444. Scenario Builder was also explained in meetings with interested parties, such as a March 22, 2010 meeting with representatives of the national poultry industry (held in conjunction with such a webinar) at which tables of data and other information were extracted from Scenario Builder in response to a set of questions provided before the meeting.

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<sup>17</sup> *See also, e.g.*, Exhibits C and D, respectively joint meetings of the Agriculture (Nutrient and Sediment Reduction) Workgroup and Watershed Technical Workgroup at AR0000430 [12/11/2008] and AR0000431 [1/15/2009; Exhibit E, AR0000431 [2/1/2010 Watershed Technical Workgroup Handout, *Estimates of County-Level Nitrogen and Phosphorus Data for Use in Modeling Pollutant Reduction (June 2009)*]

App. C, AR0000443 (3/22/10 meeting). Those record materials, together with the documentation for Scenario Builder, provided Plaintiffs with sufficient information for them to effectively comment on the draft TMDL. Plaintiffs have not demonstrated otherwise.

EPA made available the documentation for the Chesapeake Bay Water Quality Sediment Transport Model (“WQSTM”) by providing an internet address in the September 24, 2010 draft TMDL to *The 2002 Chesapeake Bay Eutrophication Model*. AR0023958 (citing [http://www.chesapeakebay.net/content/publications/cbp\\_26167.pdf](http://www.chesapeakebay.net/content/publications/cbp_26167.pdf)). The WQSTM comprises several models, one of which is the sediment transport model. AR0016176-AR0016403. Because the sediment transport model was added to the WQSTM group later in the process, the 2002 documentation covers all models except the sediment transport model. Nevertheless, other information about the sediment transport model was made available to the public. EPA Opp’n at 53-55. Plaintiffs contend that documentation for the sediment transport model was not complete, but make no attempt to identify ways in which the information about the sediment model that is in the administrative record was inadequate to allow public comment. Pl. Opp’n at 32-34. Accordingly, Plaintiffs fail to meet their burden. *See Small Refiner Lead Phase-Down Task Force*, 705 F.2d at 540-41.

Moreover, the administrative record contains extensive information about the sediment transport model. Through the Partnership's Scientific and Technical Advisory Committee, the Bay Partnership convened a series of independent scientific peer review panels addressing different elements of the sediment transport model. No panel concluded that the available information – all of which is in the administrative record and was publicly available before September 24, 2010 – was inadequate to enable it to complete its respective review. The administrative record also contains the full record and results of each peer review panel. AR0016404; AR0014959-AR0014963. In addition, the draft Bay TMDL document described how the sediment transport component of the overall Chesapeake Bay Water Quality Sediment Transport Model was specifically applied in developing the sediment load allocations. AR0023991; AR0024008-AR0024012; AR0024015-AR0024016; AR0024317-AR0024323; and AR0024374-AR0024384. Plaintiffs have not identified any information contained in the final documentation published in December 2010, AR0016176-AR0016403, that should have been made available earlier to facilitate public comment.

To the extent that the available information about the sediment transport model allegedly was not complete, Plaintiffs cannot show any prejudice to their ability to comment on EPA's draft Bay TMDL decision. This is because the sediment simulation results from the sediment transport model had negligible



influence on the water quality simulation of the critical tidal Bay water quality criteria of dissolved oxygen and chlorophyll *a*. Both before and after the sediment transport model was added to the suite of models, the water quality model produced substantially the same nutrient loads resulting in the same dissolved oxygen response. AR0005397-AR0005405. Specifically, the nitrogen load estimated to remove dissolved oxygen impairments in the Bay was 175 million pounds in the 2002 model and 186 million pounds in the 2010 model. Similarly, the difference in the phosphorus load estimated to remove dissolved oxygen impairments in the Bay in the 2002 model and in the 2010 model was only 260,000 pounds. AR0000007; AR0005397-AR0005405. While the sediment simulation add-on to the 2010 model did improve CBP's estimates of sediment loads in the Chesapeake, the estimated sediment load ultimately made little difference in the TMDL allocation because the allocation was driven entirely by the nutrient reductions needed to achieve the dissolved oxygen water quality standard. In other words, the 2010 allocation was entirely dependent on the water quality simulation already fully documented in *The 2002 Chesapeake Bay Eutrophication Model*, as well as in the results of the peer reviews, all available long before and during the public comment period in 2010. AR0015530-AR0015903. AR0016404. AR0014959-AR0014963.

Plaintiffs have failed to satisfy their burden of “indicat[ing] with ‘reasonable specificity’ what portions of the documents it objects to and how it might have responded if given the opportunity.” *Small Refiner Lead Phase-Down Task Force*, 705 F.2d at 540-41. Indeed, they do not even attempt to identify specific deficiencies in the record or explain how their comments on the Bay TMDL would have differed if documents allegedly “withheld” had been available during the public comment period.

**B. Plaintiffs’ criticisms of the models are unfounded.**

**1. EPA did not use the Watershed Model at an improper scale.**

The Bay TMDL established allocations for each of the 92 Bay segments at the major river basin and state scales. Plaintiffs acknowledge that EPA used the Watershed Model to establish those allocations, but allege other improprieties, none of which is supported by the record. Pl. Opp’n at 37-40.

The Plaintiffs incorrectly allege that “the Agency failed to mention that the ‘watershed model tracked all sources – point, non-point and air deposition – within the watershed and simulated the fate of those pollutants as they were transported through the free-flowing river systems of the watershed and delivered to the tidal Bay waters.’” *Id.* at 37-38. That is the exact purpose of a watershed model, and the Bay TMDL document specifically stated that the Bay Watershed Model was used to track the transport of nitrogen, phosphorus, and sediment from the full

range of pollutant sources within the airshed and watershed, and to determine the fate of those pollutants once they reached the Chesapeake Bay and its tidal tributaries and embayments. AR0023936-AR0023938; AR0023948-AR0023957; AR0000169-AR0000172; AR0000181-AR0000190. This is the same use of the models that EPA outlined in the 2003 document cited by Plaintiffs (AR0012723).

Plaintiffs complain that the state resource agencies used the Watershed Model as a tool to assist them in developing allocations for watersheds, including local watersheds, in their jurisdictions.<sup>18</sup> The model itself was developed by the Bay Partnership for use by any planning agency. “By offering the Bay Watershed Model as a community model, end users—typically TMDL model developers and watershed researchers and implementation plan developers—can use the model independently as-is or as a starting point for more detailed, small-scale models.” AR0000181. The Partnership concluded that, “in some cases, the best approach for a local TMDL exercise would be to use appropriate elements of the Phase 5 Model with augmentation of local-scale land use and monitoring data,” and that ‘local allocations should be evaluated on a case by case basis, and this is what our

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<sup>18</sup> Plaintiffs also allege that EPA “declined to mention” this use. However, EPA’s initial brief states: “In their WIPs, the seven Bay states developed proposed allocations at *smaller scales, including local watersheds*, using a combination of modeling results, programmatic implementation capabilities, monitoring data, land use information, and other information.” EPA Opp’n at 57-58 (emphasis added).

State partners are doing.” AR0014967-AR0014968. In developing local allocations, states used a variety of local data, including land use information, annual data on agricultural conservation practices implemented by farmers, stormwater best management practices installed by municipalities, and current treatment technologies at their wastewater discharge facilities. AR0024982-AR0025421; AR0025422-AR0025524; AR0025525-AR0026300; AR0026301-AR0026392; AR0026393-AR0026671; AR00266720-AR0026812; AR0026813-AR0026962; AR0000250-AR0000261; AR0005397-AR0005405; and AR0012888-AR0012937. Plaintiffs cite no evidence that any state WIP contained any local watershed allocation that was based on an improper application of the Watershed Model.<sup>19</sup>

Nor was the Watershed Model improperly applied to establish specific waste load allocations for significant municipal and industrial wastewater discharge facilities in the final Bay TMDL. Those WLAs were based on the facility-specific allocations contained in the states’ WIPs. The states’ allocations were based on records of facility specific monitoring data, and factored in current treatment technologies, facility discharge capacity, cost, existing industrial processes, and other information. AR0024982-AR0025421; AR0025422-AR0025524;

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<sup>19</sup> Many of Plaintiffs’ record citations on this issue are to documents pertaining to state efforts to develop Phase II WIPs in 2011 – after the final Bay TMDL in 2010. *See* Pl. Opp’n at 39.

AR0025525-AR0026300; AR0026301-AR0026392; AR0026393-AR0026671;  
AR00266720-AR0026812; AR0026813-AR0026962.; AR0000250-AR0000261;  
AR0005397-AR0005405; AR0012888-AR0012937.

EPA evaluated the states' final Phase I WIPs to determine whether the total of all WLAs and LAs met the state-wide and major river basin allocations.

AR0000197. In making that evaluation EPA used, among other tools, the Watershed Model at the state-wide and major river basin scale. EPA's application of the model was consistent with, rather than a rejection of, the Scientific and Technical Advisory Committee's ("STAC") peer review panel's conclusion in 2008 that the model could properly be used at the county level for tributaries with more than 100 cubic feet per second mean annual flow. AR0015016.

Plaintiffs claim must be rejected because they have failed to show that EPA applied the Watershed Model in a manner that resulted in no rational relationship between the model chosen and the situation to which it was applied. *See Chemical Mfrs. Ass'n v. EPA*, 28 F.3d 1259, 1265 (D.C. Cir. 1994).

## **2. EPA documented its estimates regarding tillage practices.**

Plaintiffs' claim that EPA did not have support for its tillage data is incorrect. The draft Bay Watershed Model Documentation, available during the public comment period, specifically cited the Conservation Technology

Information Center report containing the tillage data and provided the internet address for the report. AR0014362. As described in the model documentation:

Information from the Conservation Technology Information Center (CTIC 1989–2004) provides annual information by county of the splits between the conventional and conservation tillage acres for these two crop land uses. The CTIC National Crop Residue Management Survey lists the percent under conservation tillage for corn, small grain, soybeans, and sorghum on a county level for each year starting in 1989. The percent under conservation tillage for the composite crop is calculated as a weighted average of the individual crop percentages, using crop acreage as a weight.

*Id.*

The Natural Resources Conservation Service (“NRCS”) tillage data were not the most detailed available data regarding tillage practices and were not adequate for use in the Watershed Model. Tillage data used in the NRCS model were not fully available to the public due to privacy restrictions under the Farm Bill.

AR0029726. In addition, the NRCS tillage data are reported at a very large scale and only provide information on tillage practices at particular points in time, whereas the Watershed Model required annual county-level tillage data throughout the 26 years of model calibration and application — 1985 through 2010.

AR0014249-AR0014806.

Despite these deficiencies in the NRCS data, EPA staff worked with USDA staff to compare CTIC data and the NRCS data before concluding that differences in the data were not significant to estimating nutrient loads from agricultural lands.

EPA Opp’n at 60-61. Plaintiffs ignore the undisputed deficiencies in the NRCS data, and speculate that consultations between technical staff were insufficient to support EPA’s decision not to use the NRCS data. Pl. Opp’n at 41. Without any support in the record, Plaintiffs further speculate that if two models produce similar results while using different tillage data sets, then “one or both of those models *may* be suspect.” *Id.* (emphasis added). Such speculation does not demonstrate that EPA’s data choice was arbitrary or capricious. Even if Plaintiffs’ assertions had some support in the record, EPA’s choice of data is a technical decision entitled to the highest deference. *E.g., Pa. Dept. of Env’tl. Res. v. EPA*, 932 F.2d 269, 272 (3d Cir. 1991).

### **3. EPA addressed criticisms of its information about manure management.**

EPA did consider and respond to the public comments regarding the management of manure at animal feeding operations. In response to specific concerns, EPA noted that: EPA had revised data reflecting the quantity of manure generated, AR0001550; EPA considered the effectiveness of phytase use as a best management practice, *id.*; EPA counted manure transport and other agricultural practices in the states’ WIPs as planned progress toward the goals of the TMDL, AR0001488; “[a]ll assumptions of the [animal feeding operations] simulation are agreed upon by the then-active Nutrient and Sediment Subcommittee which had broad representation by federal, state, local, academic, and private groups,” *id.*

(citing internet address for meeting minutes, *see, e.g.*, Ex. F and G, AR0000430); and “[t]he method for quantifying the manure produced and the amount of loss due to storage and handling has been vetted with the Agriculture Nutrient and Sediment Reduction Workgroup as well as the Watershed Technical Workgroup,” AR0001548.<sup>20</sup>

EPA also explained why land used for animal feeding operations (“AFOs”) was classified as “impervious” even though the surface of the land did not meet the ordinary definition of that term:

The “impervious classification” is just a comparison for understanding the modeling. These acres are inundated with nutrients for years because the sacrifice areas are consistently used for manure handling and storage. The capacity of any remaining compacted soil on this land to store nutrients is extremely low. Therefore AFO acres are simulated as having the entirety of the nutrient and sediment load being at the streams’ edge. The nutrient and sediment load can be abated by BMPs, but where there are AFO acres without BMPs installed, the loss of poultry litter is 15% of that produced in confinement.

AR0001548. “The simulation as an impervious surface is to generate load that has a flashy temporal characteristic. The method of simulation affects the timing, not the absolute amount of load.” AR0001550.

Plaintiffs’ arguments about EPA’s determination of the quantity of nutrients contributed by manure to streams are predicated on a misunderstanding about

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<sup>20</sup> EPA did not refer in its initial brief to these responses to comments, and to those noted below, because it understood Plaintiffs’ argument to have a different focus.



terminology. “The mass of nutrients lost during storage and handling is *applied to the land use* that includes the animal production area (animal feeding operation, or AFO).” Pl. Ex. 15 at 5-33. Manure lost during storage and handling is deemed to have been “applied” to AFOs at the edge of stream, just like any other land use. *Id.* However, the amount of nutrients applied to the AFO and the amount of nutrients calculated by the model to actually enter the stream are not the same due to further modeling processes that, for example, account for application of best management practices. AR0014249-AR0014806.

Plaintiffs have identified no public comments to which EPA did not provide a reasoned response. EPA explained its reasons for classifying AFOs as impervious and for its calculations of nutrients contributed by AFOs. Plaintiffs have cited no evidence that EPA’s decisions on these technical subjects were arbitrary or capricious.

## CONCLUSION

Plaintiffs’ claims should be dismissed because Plaintiffs have failed to demonstrate they have standing. If their claims are not dismissed, this court should enter judgment in favor of EPA on each of Plaintiffs’ claims. For the reasons discussed above, EPA did not exceed its authority in issuing the Bay TMDL; the public had a fair opportunity to comment on the draft Bay TMDL and Plaintiffs have not proved that they were prejudiced by any alleged deficiencies in the

massive amounts of publicly available information; and EPA's use of models is supported by the administrative record.

Respectfully submitted,

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### **CERTIFICATE OF COMPLIANCE**

Pursuant to Local Rule 7.8(b)(2), the undersigned certifies that the foregoing Reply Memorandum in Support of EPA's Cross-Motion for Summary Judgment complies with the word count limit and does not exceed the allotted 10,000 words. According to the word count feature of the word-processing software used to prepare this Memorandum, the Memorandum contains 9,847 words.

/s/ Kent E. Hanson  
Kent E. Hanson

## CERTIFICATE OF SERVICE

I certify that on June 20, 2012, a copy of the foregoing Reply Memorandum in Support of EPA's Cross-Motion for Summary Judgment was served by electronic service via the Court's ECF system pursuant to Standing Order 03-1, ¶ 12 upon:

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